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ABSTRACT

This guide, which is intended for project directors, coordinators, and other professional staff involved in developing/delivering workplace education programs, explains the process of developing a functional context workplace education curriculum. Discussed first are the following: the types of information needed to develop a functional context curriculum; procedures for gathering the information; and the process of using the goals, objectives, and critical tasks defined by a workplace advisory council to organize the information gathered. The following components of a workplace education curriculum module are explained and illustrated: workplace education module goal(s); workplace education objective(s); workplace competencies; and basic skills. Next, the functional context approach of translating identified job tasks into job performance indicators is illustrated, and workplace competencies, and basic skills are outlined. The four components of general lesson plans (background information, demonstration, practice, extension) are explained, and the organization and layout of a typical lesson plan are illustrated with a sample lesson plan taken from a workplace writing module. Concluding the guide are a brief discussion of the process of reviewing/validating a workplace education curriculum and a list of four informational resources. (MN)

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# Developing Workplace Education Curriculum

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# *Developing Workplace Education Curriculum*

## *1996*

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# Developing Workplace Education Curriculum

A solid workplace education curriculum acts as a bridge between company and employee needs, goals, and objectives, and the actual educational attainment of the basic skills and workplace competencies that meet these needs, goals, and objectives. This bridge is built using the total of information that adult education providers have collected throughout the workplace education program development stages.

As outlined in the previous guides in this *Workplace Education Program Development Notebook*, adult education providers will begin collecting information from the point of initial contact with the company by listening to and assessing the needs, goals and objectives expressed by company representatives. The advisory council will then clarify and solidify these needs through the identification of those jobs that are critical to the success of the employees and the company. Finally, the adult education provider will analyze these critical job tasks to find the contextual and processing information used to perform the workplace competencies and develop a customized, site-specific curriculum.

This guide will provide project directors, coordinators and professional staff an understanding of the process involved in workplace education curriculum development; the development of functional context curriculum; the components involved in the development of workplace education curriculum and lesson plans; and the components that ensure transfer of learning to the workplace. Several supplemental resources are listed in the back of this guide for additional information on workplace education curriculum development.

## *What information do you need?*

As mentioned in the introduction, adult education providers will use the total of information gathered throughout the program planning process. Adult education providers will consider information gathered during initial conversations with company representatives and while observing the company culture. They will utilize the information obtained using the needs assessment conducted with the workplace advisory council, and finally, they will use the information gathered while analyzing the critical job tasks during the job task analysis. All of this information is essential to ensuring the curriculum is site-specific and customized for the workplace; however, it provides only part of the information needed to develop a successful curriculum.

In addition to the information gathered at the workplace, adult educators will use their adult learning expertise to address other issues that influence the success of the curriculum. Two important considerations which are frequently dealt with in adult education programs are addressing the fear, shame, and denial associated with literacy or basic skills needs; and accommodating various learning styles in instruction. Both are significant factors in the workplace education curriculum design and require attention.

The fear, shame, and denial associated with basic skills programs in the workplace can be found at all levels of the organization. Upper management might fear the damage the company image could sustain if the public knew about a basic skills "problem". Additionally, employees might fear losing their jobs or losing opportunities for advancement in the company. These fears often stem from the stigma associated with illiteracy. Frequently, companies and individuals deny that a basic skills problem exists. It is important that adult education providers consider these issues during each step in program design.

Adult education providers are accustomed to dealing with the fear, shame and denial of basic skills program participants. In the workplace there are options that can be used to avoid potential problems. For example, the program name and curriculum should avoid using terms like literacy, illiteracy, basic skills, remedial skills, and deficiencies. Instead, providers can use more accurate and descriptive terms like workplace communication skills, workplace learning skills, and math for the workplace. Additionally, the workplace education program planners should address how to handle the confidentiality of assessment scores and classroom activities, and how participant recruitment will be handled. These and other measures help to avoid the stigma associated with basic skills and illiteracy and promote an environment conducive to learning.

As with all adult education curriculum, education providers must ensure that the learning styles of their students are accommodated in the curriculum. When writing the workplace education curriculum, the adult education providers will enhance the curriculum to accommodate a diverse range of perceptual learning styles. Learning activities that promote the use of many perceptual modalities (visual, auditory, tactile, kinesthetic, and haptic) enhance the learning experience for all participants.

### How do you organize the information gathered?

To begin organizing the information collected throughout the planning process, the adult education provider will categorize the information using the goals, objectives and critical job tasks defined by the workplace advisory council. These categories will provide a structure in which the information is organized into curriculum modules. The following illustrates this process:

**Workplace Education Program**

Company Name: **XYZ Co.**
Date: **10/20/95**

**Goal 1:** To improve the Quality Program in departments F and Q.

**Objective 1:** Employees use the error control forms correctly to communicate product and machine errors between departments.

**Job Task 1:** Fill out Error Correction Request form

Workplace Competency(s): Interpret & communicate information

| | | |
|---|---|---|
| Basic Skills: | Reading: | Cause and Effect |
| | Grammar/Usage: | Abbreviations |
| | | Comparatives |
| | | Parts of Speech (noun, pronoun, verb, adjective, adverb) |
| | | Spelling rules |
| | Writing: | Forms |

**Critical Job Task 2:**

**Objective 2:**

The information contained in this example represents the information obtained from the advisory council and from the job task analysis. As shown above, one of the overall goals of the workplace education program is "to improve the quality program in departments F and Q." One of the critical job tasks the advisory council identified is the use of the error control forms. This critical job task became one of the objectives of the course. After analyzing this critical job task during the job task analysis, the adult educator found the workplace competencies, basic skills, and skill levels involved in performing the task. Each goal might have many objectives and critical job tasks. These would be listed sequentially as shown in the previous example.

After each goal, objective and critical job task has been analyzed, the adult education provider will utilize this information to develop curriculum modules. Modules will be developed by matching the workplace competencies and basic skills listed under one critical job task with those of another. For example, a Workplace Writing module might consist of many goals, objectives and critical job tasks that utilize the same or similar workplace competencies and basic skills. This Workplace Writing module would teach the basic writing skills in the context of many different job tasks which in turn addresses the goals and objectives of the workplace education program.

## What is included in a workplace education curriculum module?

As mentioned above, the curriculum module will consist of many goals, objectives and critical job tasks that utilize the same or similar workplace competencies and basic skills. This information is not only utilized in developing the module's lesson plans, but should also be outlined in an introduction to each curriculum module. This explanation will allow the business partner and workplace education instructor to identify and understand what each module addresses and assist in the approval of the curriculum by the advisory board. The following example shows one of many possible formats to delineate the goals, objectives, workplace basic skills and workplace competencies.

*Module Introduction Format:*

- **Workplace Education Module Goal(s):** *When writing the goal(s) of the workplace education module, be specific, clear and concise.*
- **Workplace Education Objective(s):** *State the workplace education module objectives in terms of performance, conditions, desired behavior and/or criteria.*
- **Workplace Competencies:** *List the workplace competencies identified during the job task analysis that pertain to the workplace education module.*
- **Basic Skills:** *List the basic skills identified during the job task analysis that pertain to the workplace education module.*

*Module Introduction Format Example:*

**Workplace Writing**

**Introduction**

The goal of this training module is to enhance the written communication skills necessary in performing the critical job tasks required by XYZ Co. The workplace competencies and workplace basic skills addressed in this module are critical to decreasing rates of error in the manufacturing, assembly and shipping of XYZ Co. products by promoting effective and efficient written communication.

The following is a list of target workplace competencies and workplace basic skills addressed in this module.

**Workplace Competencies:**

Acquires and uses information
- Acquires and evaluates information
- Organizes and maintains information
- Interprets and communicates information

**Workplace Basic Skills:**

- Applies and interprets symbols and abbreviations
- Compares and Contrasts information in writing
- Forms
- Interprets data on forms
- Prints legibly
- Predicts outcomes
- Sequences information in writing
- Summarizes information in writing
- Transfers written information
- Utilizes charts and graphs
- Utilizes correct spelling
- Utilizes language mechanics
- Utilizes patterns of organization
- Utilizes standard English grammar

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1. Utilizing "wh" questions
2. Patterns of organization
3. Logical fallacies
4. Detailed instructions/sequencing
5. etcetera

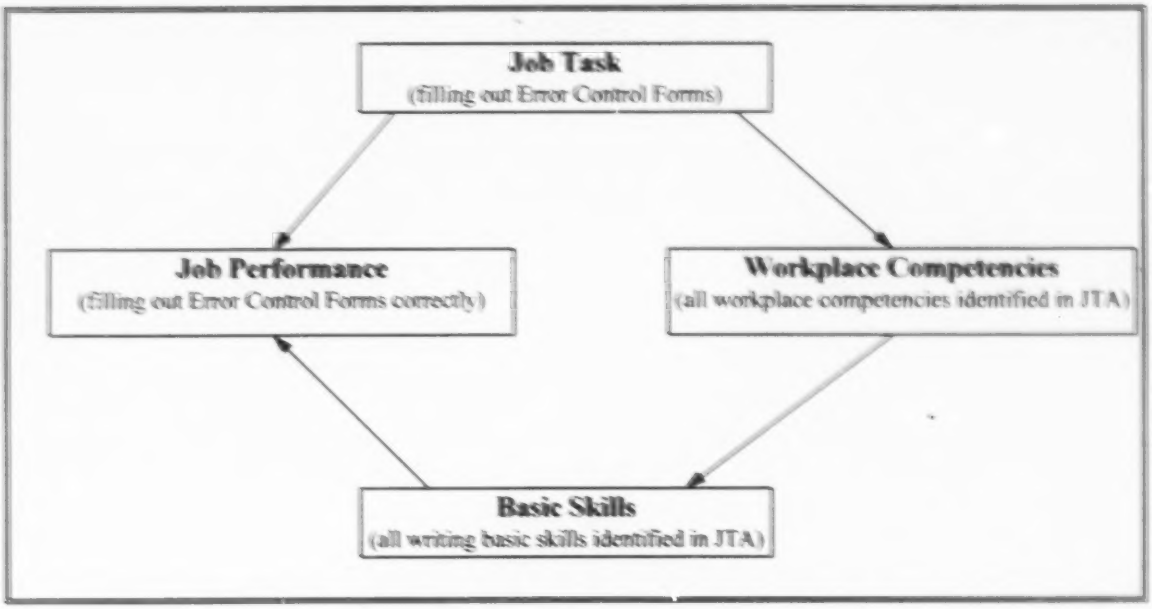
In this example, the module goal is stated clearly and concisely; *The goal of this training module is to enhance the written communication skills necessary in performing the critical job tasks required by XYZ Co.* This goal statement reflects the goal(s) expressed by XYZ Co. to the adult education provider. XYZ Co. communicated that there was a need to improve the written communication skills of the target employees. This goal is further defined in the next sentence that states the objective(s) of the Workplace Writing module; *The workplace competencies and workplace basic skills addressed in this module are critical to decreasing rates of error in the manufacturing, assembly and shipping of XYZ Co. products by promoting effective and efficient written communication.* This statement describes an objective of the workplace education program in terms of criteria, *to decrease rates of error*, while identifying the expected performance of *effective and efficient written communication*.

The list of workplace competencies and basic skills follows to further delineate the modules contents for the workplace advisory council and instructor. A *Table of Contents* identifying the lesson plans included in the module will follow the introduction. Additional information can be included in the introduction. Some adult education providers will identify critical thinking and problem solving skills, or list the basic skills applications in the workplace. This decision is made based upon the adult education provider's experience with the specific site and the workplace advisory council's preferences.

Probably the most obvious components of the workplace curriculum module are the actual lesson plans. The adult education provider will develop lesson plans that meet the modules stated goals, objectives, workplace competencies and workplace basic skills using the functional context approach. There are many facets to writing effective lesson plans. The following section will look at the processes involved in utilizing a functional context approach; creating lesson plans that provide for transfer of training; and organizing the lesson plan layout in the workplace curriculum module.

## The Functional Context Approach

The functional context approach to curriculum design and lesson planning involves a cyclical process that incorporates the information gathered throughout the workplace education program planning process. The following graphic outlines this process based on the Workplace Writing module example used throughout this guide.


Job Task
(filling out Error Control Forms)
Job Performance
(filling out Error Control Forms correctly)
Workplace Competencies
(all workplace competencies identified in JTA)
Basic Skills
(all writing basic skills identified in JTA)

As illustrated in the above graphic, the job task or tasks addressed by lesson plans are identified, and the workplace competencies and basic skills are taught in the context of the job task. For example, the workplace competency, *communicating information*, and the basic skill, *utilizing patterns of organization*, will be taught through exercises that utilize workplace error control forms. The lesson plan will include extension exercises that *involve transferring the skills learned in the classroom to the employees' jobs*. Finally, measurement of skill attainment is based upon job performance and/or changes in behavior, criteria, and/or conditions. This process is a continuous cycle that provides for individualized instruction and links lesson plans to provide a cohesive curriculum module.

There are definite reasons to use the functional context approach in lesson planning and curriculum development that range from motivational factors to facilitating the *transfer of training*. For instance, the functional context approach uses concrete examples and realia that increase the likelihood of transfer of skills learned in the classroom to the lives and jobs of the students. Moreover; it allows for lessons that stress critical thinking processes instead of content which in turn promotes the learning to learn skills necessary in today's changing workplace.

## General Lesson Plan Components

When organizing a lesson plan, there are four general components to consider: 1) background information; 2) demonstration; 3) practice; 4) extension. Each component plays a vital role in creating a comprehensive lesson plan. The following provides information about each component, the order in which they appear, and basic teaching techniques which are frequently used in the lesson plan.

***Background Information***

This component provides students the opportunity to connect with the lesson plan and express or become aware of their own experiences with the subject matter. This component builds motivation by providing students with information and an understanding of the lesson's goals or purpose. This in turn can result in the students' ownership of the learning process. The background information component usually consists of:

- Discussion/conversation
- Pre-reading activities
- Reading activities
- Comprehension check of new concepts, materials, vocabulary, etc.

***Demonstration***

This component provides direct instruction of new concepts, skills, vocabulary and competencies. Because the functional context approach focuses on critical thinking processes, direct instruction will model these processes in the context of the job. The demonstration activities frequently involve the use of:

- Role play
- Example
- Simulation

***Practice***

The practice component provides the students time to apply or practice the new concepts, skills, vocabulary and competencies. Through practice activities the students perform what was demonstrated to eventually apply these skills on the job. The practice component generally involves:

- Individual activities
- Cooperative learning techniques
- Activity review

***Extension***

The extension component of lesson planning provides for transfer of training to the jobs and work lives of students. It increases the likelihood that skills learned in the classroom will be retained through their use on the job. This important component will greatly impact the workplace education participants and program because it is on the job that success will be

observed in the evaluation of skills attainment and overall program effectiveness. The extension component incorporates:

- Applied skills applications outside of the classroom
- Extension activities check or review

## Lesson Plan Organization and Layout

Just as each curriculum module defines its contents in terms of goals, objectives, workplace competencies and workplace basic skills, each lesson plan will delineate its contents for the business partner and workplace instructor. Each lesson plan will state the objectives, workplace competencies and workplace basic skills addressed in the lesson. This information can be formatted in may ways. The following is an example of one possible format.

**Module:** **Workplace Writing**

**Lesson 2:** **Patterns of Organization**

**Objective:** To introduce, demonstrate and practice the use of *patterns of organization* in written communication to increase effective writing and decrease rates of error.

**Workplace Competencies:**
- Acquire and evaluate information
- Interpret and communicate information

**Workplace Basic Skills:**
- Apply symbols and abbreviations
- Forms
- Interprets data on forms
- Prints legibly
- Predicts outcomes
- Sequences information in writing
- Utilizes correct spelling
- Utilizes language mechanics
- Utilizes standard English grammar

**Materials:**
Black/white board, chalk/marker, pencils, paper, and appendices 2.1, 2.2, 2.3, 2.4, and 2.5

**Allotted Time:**
11/2 - 2 hours

page 1

**Activities:**

**I. Discussion**

A. Ask students the following questions to introduce and discuss the concept of organizational patterns:

1. Have you ever had difficulty following a memo, report, or document on the job?
2. Why was it difficult to follow?
3. Have you ever tried to follow directions that were written in the wrong order?

B. Introduce lesson topic: *Patterns of Organization*

**II. Demonstration**

A. Distribute and review the Patterns of Organization handout (appendix 2.1) with the students. Ask students to provide examples of written materials that demonstrate each pattern.

B. Review the ECM (appendix 2.2) with the students. Identify the pattern of organization used.

C. Ask students to complete handout (appendix 2.3) to ensure understanding of each organizational pattern.

D. Review the answers with the students. Answers are located in appendix 2.4.

**III. Practice**

A. Error Control Memo (appendix 2.5)

1. Group students in teams of three or four.
2. Ask each group to identify a common problem they have had with equipment on the job. This problem can deal with many issue, for example, safety issues, equipment operation, process concerns, etc.
3. Ask students to discuss the problem and its effects. Students may refer to the problem solving review sheet used in Lesson One (appendix 1.5).
4.
5.

**IV. Extension (Students complete one of the following extension activities)**

A. Students select a problem on the job and completes an ECM form and reports back to class.

B. Students obtain ECM example from Quality Control and identifies the pattern of organization used to write the memo.



This example organizes the lesson plan using the four general components: background information, demonstration, practice and extension. It includes examples, definitions, and copy-ready handouts in the appendices. The lesson plan should give complete and concise instructions for the workplace education instructors to follow while providing for their individualized styles. Moreover, the examples and workplace materials used in the lesson plan must be used accurately and appropriately in order to provide quality instruction and meet the goals of the workplace education program. After a draft of the curriculum is completed, the curriculum should be reviewed and revised to ensure that it is "user friendly" and accurate.

### Who reviews the workplace education curriculum?

The curriculum is reviewed by the workplace education advisory council. The council members will evaluate each curriculum module based upon the overall goals and objectives of the workplace education program and provide feedback about the validity of the examples and materials used in each module. The review will allow the business partner to question and discuss any concerns prior to instruction and solidify the "buy-in" of company representatives. In addition to the review by the advisory council, adult educators will ask instructors to review the curriculum to confirm that it is easily understood and usable by other instructors. Although the validation process is the final step in the development of the workplace education curriculum, adult educators should remain flexible and make changes to enhance the curriculum throughout actual instruction. All changes should be communicated to the advisory council for approval.

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This guide has focused on the process involved in workplace education curriculum development; the development of functional context curriculum; the components involved in the development of workplace education lesson plans; and the components that ensure transfer of learning.

For more information and ideas about developing workplace education curriculum, please refer to the references located in the back of this guide. As always, the Office of Adult Education will provide technical assistance or training to facilitate your workplace education program development

For assistance contact:

**Douglas Glynn**
**Workplace Education Consultant**
**303-866-6936**

## Informational Resources

Burenstein, Benjamin D., Sowing the Seeds, Literacy in a Clothing Factory: A Workplace Literacy Curriculum. Philadelphia, PA: Center for Literacy, 1989.

Curriculum Materials: A Review for Workplace Education Programs. Donna Manly, editor. Madison, WI: Center on Education and Work, 1994.

Henard, Denise, Paul Lloyd, and Larry Mikulecky, A Guidebook for Developing Workplace Literacy Programs. 1992.Workplace Dynamics: Communication, Teamwork and Problem Solving. McVey and Associates, Inc. Syracuse, NY: New Readers Press, 1992.

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